URS

October 13, 2009

Duke Energy
Miami Fort Generating Station
11021 Brower Road
North Bend, OH 45052

Attention: Ms. Sue Wallace
Chemical Engineer

Re: Results – **September 2009**
Low-Level Mercury Sampling
Miami Fort Generating Station
North Bend, Ohio

In accordance with your request, URS prepared the following letter report transmitting low-level mercury test results for samples collected at the Miami Fort Generating Station located in North Bend, Ohio.

The scope of work involved the sampling of intake and discharge waters from the following sources and analysis of those samples for low-level mercury.

1. River Intake
2. Station 601 (WWT Influent)
   [Samples were collected at this station one detention time before samples collected at Outfall 608]
3. Outfall 608 (WWT Effluent)
   [Samples were collected at this outfall one detention time after samples collected at station 601]

Each sample was collected following the required Method 1669: *Sampling Ambient Water for Determination of Trace Metals at EPA Water Quality Criteria Levels* (Sampling Method) and analyzed by Method 1631. Field staff from URS' Cincinnati office conducted the sampling and TestAmerica Laboratories Inc. located in North Canton, Ohio performed the analytical procedures. The analytical procedures included the analyses of a collected sample and duplicate sample (duplicate collected at Outfall 608), field blank (field blanks collected at the River Intake and Outfall 608), and trip blank. At the request of Duke Energy, total metal mercury samples were collected from Station 601 and analyzed by Method 7470A.

The results from the initial **September 1-2, 2009** sampling event and requested re-sampling event for Station 601 conducted **September 21-22, 2009** are presented in the attached Table 1. A copy of the laboratory reports are enclosed with this letter.

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URS is pleased to provide continued assistance to Duke Energy in the execution of their environmental monitoring requirements. If there are any questions regarding the content of this report, please do not hesitate to contact the undersigned.

Sincerely,

URS Corporation

Michael A. Wagner
Project Manager

Dennis P. Connair, C.P.G.
Principal

MAW/DPC/Duke Energy-MFS LL Hg 2009
Job No. 14948701

**TABLE 1**

**ANALYTICAL RESULTS**
**LOW-LEVEL MERCURY**
**RIVER INTAKE, STATION 601, OUTFALL 608, AND OUTFALL 002 (POND B)**

**DUKE ENERGY - MIAMI FORT STATION**
**NORTH BEND, OHIO**

| Sample ID | Date Sampled / Results (ng/L, parts per trillion) | | | | | | |
|---|---|---|---|---|---|---|---|
| | 7/1/09 | 8/3/09 | 9/1/09 | 9/21/09 | 10/X/2009 | 11/X/2009 | 12/X/2009 |
| River Intake | 2.3 | 8.6 B | 2.0 | NSC | | | |
| Station 601 (7) | 224,000 | 226,000 | NSC | 62,400 | | | |
| Station 601 (7)* | NSC | 4,600* | 58,200* | 8,900* | | | |
| Station 601 (7)* [duplicate] | NSC | NSC | NSC | NSC | | | |
| Station 601 (8) | 260,000 | 956,000 | NSC | 73,000 | | | |
| Station 601 (8)* | NSC | 4,800* | 172,000* | 314,000* | | | |
| Station 601 (8)*[duplicate] | NSC | NSC | NSC | 41,600* | | | |
| Outfall 608 | 110 | 123 B | 63.4 | 57.7 | | | |
| Outfall 608 [duplicate] | 108 | 122 B | 62.2 | 58.2 | | | |
| APB-002 | NC | 5.8 | 2.5 | NSC | | | |
| APB-002 [duplicate] | NC | 5.3 | 2.4 | NSC | | | |
| Field Blank (RI-FB) | <0.50 | 2.8 | <0.50 | NSC | | | |
| Field Blank (WWT-FB) | <0.50 | 1.0 | 0.72 | <0.50 | | | |
| Field Blank (AP-FB) | NC | <0.50 | <0.50 | NSC | | | |
| Trip Blank | <0.50 | <0.50 | <0.50 | <0.50 | | | |

Samples collected by URS
Samples analyzed by TestAmerica of North Canton, Ohio
NC - Not Collected. (Ash Pond B Outfall 002 collected quarterly, August and December)
NSC - No Sample Collected
* = Total mercury analysis utilizing Method 7470A [results converted from ug/L (parts per billion) to ng/L]
B = Low-level mercury detected in associated field blank collected at sampling location